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ABSTRACT

A research and development program studied various aspects of the skills required by the telephone tutors in distance education at Athabasca University. The pilot project trained volunteers in interpersonal communication skills. Measures of effectiveness taken before and after training indicated that the tutors participating in the training program view it positively, that the training is effective in producing increases in interpersonal behavior, and that these gains transfer to the live tutoring situation. The levels of verbal interaction were still short of effective levels indicated in previous research. To give more specific information on the effect of tutor interpersonal skills on learner behavior, two separate experimental programs were initiated. Experiment 1 examined the personal skills of three tutors to determine their levels of functioning and the possible effect of that level of functioning on student behavior. All three tutors were quite low in the facilitative conditions. Data indicated that more open-ended questioning on the part of the tutor led to a better student progress rate. The second study examined the interpersonal skill level of two tutors who had engaged in interpersonal skills training. Results indicated that a higher functioning tutor was more effective on all student outcome measures. Recommendations for improving tutor training were made. Eight pages of references and bibliography are included. (Instruments are appended.) (YLB)

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Project REDEAL

RESEARCH AND EVALUATION OF TUTOR SKILLS TRAINING PROJECT

Victoria Williams

REDEAL Research Report #4

September, 1980

Sponsored by

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Abstract

A research and development program designed to study many aspects of the skills required by the telephone tutors in distance education was initiated between 1979 and 1980 at Athabasca University. The major purposes of this program were to: a) analyze tutor skills, focussing on the interpersonal skills necessary to be effective tutors; b) develop a training package and accompanying workshop to train tutors in the appropriate interpersonal skills; c) measure baseline levels of interpersonal performance in the existing tutor population at Athabasca University; d) engage in training for volunteer tutors, and; e) measure effectiveness on the following dimensions: i) change in tutor behaviour; ii) generalization of tutor behaviour to the live tutoring situation; iii) the effect on learner behaviour as a result of the change in interpersonal skills.

The results indicate that Athabasca University tutors are in need of interpersonal skills training and that they are interested in the prospect of learning new relevant interpersonal skills. Measures of effectiveness taken both before and after training indicate that the tutors participating in the training program view it positively; the training is effective in producing increases in the interpersonal behaviour indices targeted in the program and that these gains do transfer to the live tutoring situation. Although the gains obtained in tutor interpersonal skills represent an improvement in the quality of verbal interaction between tutors and students, the levels of functioning are still short of

effective levels indicated in previous research.

In order to give more specific information on the effect of tutor interpersonal skills on learner behaviour, two separate experimental programs were initiated. Experiment 1 examined the interpersonal skills of three tutors to determine the level of functioning of each tutor and the possible effect of that level of functioning on student behaviour. A transcript tape analysis showed that all three tutors were quite low in the facilitative conditions; however, the data indicated that more open-ended questionning on the part of the tutor led to a better progress rate on the part of the student. The second study examined the interpersonal skill level of two tutors who had engaged in interpersonal skills training of the type similar to the program offered for tutors at Athabasca University. The functioning of these tutors, as examined by the tape analysis and the resulting learner performance data were compared. The results indicate that a higher functioning tutor was more effective on all student outcome measures. This evidence provides support for the need for tutor interpersonal skills training and its possible effect on learner performance. A discussion of the results and their implications for the design of a tutor skills training program at Athabasca University is presented with recommended procedures for providing that training offered.

The writer wishes to thank several colleagues who lent valuable support and advice which made my association with Athabasca University a pleasurable and enriching experience.

I am grateful to Bob Spencer for his assistance in the preparation of this final report. I have benefited considerably from his expertise. I thank Dan Coldeway for the opportunity he extended to me to conduct this project and his support throughout; Geoff Peruniak for generously sharing his time with me in problem-solving.

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TUTOR SKILLS TRAINING PROJECT

FINAL REPORT

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I INTRODUCTION

In August, 1979, Instructional Design, Regional and Tutorial Services and REDEAL entered into a joint effort to develop and research a tutor skills training program. The effort was borne out of the Task Force on Tutors, Coordinators and Exams of the spring of 1979. This task force made strong recommendations that tutors receive training in the interpersonal skills that encourage the development of a facilitative tutor-student relationship. Consequently, such a program was developed and field tested on two volunteer groups of tutors. The form of the skills program is a two-day workshop with a three-month follow-up phase of taping (one tutorial per month) and receiving feedback on those tapes.

The tutor skills program was set up as a one-year pilot project to ensure that research controls were applied, thereby testing the efficacy of tutor skills training being instituted at Athabasca University. The major purposes of the study were to:

1. Design a workshop-length training program addressing the interpersonal communication skills needed to effectively tutor adults in a variety of courses over the telephone.

2. Train a group of volunteer tutors in the designed workshop.

3. Measure any changes in verbal interaction which may have resulted from the training.

4. Determine what effect tutors more highly skilled interpersonally have on student progress in the courses.

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Data has been gathered on all four of the above dimensions and will be given in this report. The following organizational scheme will be used to present the information:

1. A brief account of the development and substance of the tutor skills training program.

2. A description of each of the three studies carried out during the project, study by study.

3. A discussion of the meaning of the results of the studies.

4. Recommendations for future directions for tutor training at Athabasca University.

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II DEVELOPMENT AND DESIGN OF THE TRAINING PROGRAM

DEVELOPMENT

During the early phases of the tutor skills project, all coordinators (17) and an additional 20 tutors at Athabasca University were interviewed by the project coordinator and/or Dr. Richard Pierce, consultant to the project from Carkuff Associates. The purpose of these interviews was to ascertain from both the tutors' and coordinators' points of view what the essential ingredients of tutoring are. (Appendix A contains a sample copy of the interview schedule).

From the interviews we learned that tutors feel they possess strengths and weaknesses over a variety of situations they encounter with students. The predominant feeling was that of success, i.e. they feel they are doing a good job with the majority of students, that these students are getting a lot out of the AU experience and that AU is providing a crucial service. The situation in which they feel most comfortable and most effective is helping a student with a content-related problem. Everyone also expressed feelings of frustration and ineffectiveness in some situations, e.g. unmotivated students, hostile students, resistant students, and students who digressed extensively on phone calls. Most tutors said they do not know how to handle these situations well and feel uncomfortable about not handling them effectively. These situations most commonly involve non-start and drop students and are not infrequent.

We also had confirmed a long standing belief that the emotional-interpersonal dimension of a student's life is integrally tied to his/

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her approach to learning. Students bring a host of feelings into the learning situation including anxiety about performance, lack of confidence, hesitation to call the tutor, embarrassment about "rustyness", fear of looking foolish, and excitement over success. It was felt that the communication of an understanding of these student feelings enhances the tutor-student relationship.

Finally, tutors and coordinators described a process in which they engage students to: a) check out where they are in relation to their studies, and; b) decide on a course of action. This is an interpersonal process because it involves a sharing of points of view about the particular situation. While most tutors seem to engage in this type of process, no tutor explicated it as such. The process became apparent through their descriptions of what they do and seems to be used primarily in content clarification, although it is an appropriate model to apply to all problem areas.

Thus, we found basically, that tutoring can be broken into three areas: a) content expertise; b) teaching skills, and; c) interpersonal skills.

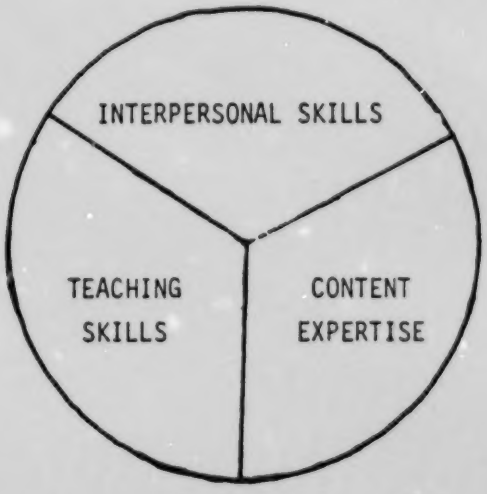

FIGURE 1

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While all three areas are essential to good tutoring, it was decided to focus our initial training efforts on the interpersonal area. It is on the interpersonal skills of the tutor that the establishment of a good learning relationship rests. Since the main functions of the tutor are to motivate and encourage students it seems reasonable to provide them with the skills necessary to build a relationship that will facilitate these functions.

The rationale for focusing on training of interpersonal skills is founded in the literature. The role of interpersonal skills in the teaching or tutoring act is to personalize the instruction. Regardless of the sophistication of the instructional material, it will not be suited to everyone. That is, instructional designers cannot anticipate the background experience of every person who enrolls in a course. This is where the human factor comes in. But the human factor is complicated by the level of communication skills possessed by the "human". Aspy and Roebuck (1978) reviewing his and other research on the relationship of interpersonal skills in teaching summarizes the data as follows:

1. Teachers' levels of emphathy, genuineness, and positive regard are positively and significantly related to:

   a. students' cognitive growth
   b. students' I.Q. gains
   c. students' attendance

2. Teachers' present levels of interpersonal functioning (E,C, and PR) are generally below those required for minimal facilitation of student growth.

3. Teachers' levels of interpersonal functioning (E,C, and PR) can be enhanced and promoted by systematic skills training as developed by Carkhuff.

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4. Teachers' gains in the interpersonal dimension (E,C, and PR) are translated into positive gains by their students.

5. Teachers demonstrate approximately the same levels of interpersonal functioning as the general population. That is, the problem is cultural rather than career specific.

Carkhuff, Berenson and Pierce (1977), Aspy and Roebuck (1978) and Gordon (1976) have delineated not only the skills, but have developed training programs that have demonstrated effectiveness in: 1) raising teacher skill development, and; 2) improving student indices of gain.

A summary of the most significant findings of Aspy and Roebuck's extensive research project (Aspy and Roebuck 1978) involved all of the following:

FINDING 1: There is a positive and significant relationship between teachers' gains in levels of functioning on interpersonal process scales and their participation in training programs designed to enhance these skills.

FINDING 2: There is a positive and significant relationship between teachers' levels of interpersonal functioning and students' gains on achievement test scores.

FINDING 3: There is a positive and significant relationship between teachers' levels of interpersonal functioning and student attendance.

FINDING 4: There is a positive and significant relationship between teachers' levels of interpersonal functioning and enhanced student self-concept.

FINDING 5: The more focused the training in a specific interpersonal skill, the greater the probability that the skill will be incorporated into the teachers' normal classroom behavior.

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FINDING 6: There is a positive and significant relationship between principals' levels of interpersonal functioning and the tendency on the part of their teachers to employ the same interpersonal skills in the class-room.

A brief review of the literature on the Flanders interaction analysis observational system at the secondary level has lead to some interesting research findings. In 1960 Flanders (1965) conducted an experiment involving 16 eighth-grade math teachers and 16 seventh-grade social studies teachers. It showed that both attitude development and achievement were significantly better for the classes of indirect teachers. During 1961-62 Amidon and Flanders (1961) conducted a study involving 560 eighth-grade math and 480 seventh-grade social studies students, producing the same results with significantly higher achievement and attitude development for the indirect group.

In another study at this grade level, LaShier (1966) found significantly higher achievement and attitude development for eighth-grade biology classes of indirect student teachers.

Finally, Campbell (1968), in a study of 10 general science teachers and their seventh-, eighth-, and ninth-grade classes, found that the indirect group was significantly better in terms of achievement (STEP Test, .001 level) and scientific attitude development (Scientific Curiosity, Cause and Effect, Suspended Judgement, .05 level).

It is thus apparent that the micro-elements involved in the indirect/direct ratios (indirectness) do affect achievement and attitude development (Aspy, 1972).

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Because input from, and feedback to, the student are so vital to the student's success in studies, (Maxwell, 1979; Flanders, 1964; Gibbs and Durbridge, 1976, and Driskell, 1977) improving instruction can be achieved through improving interpersonal skills. Maxwell's review of research on tutoring university students (1979) notes that "it is interesting that so many researchers who evaluate college teaching tend to attribute achievement gains to the enhancement of the student's self-concept resulting from a close, personal relationship developed with the tutor." (p. 97). (Of course the humanistic, or interpersonal, dimension must work in concert with well structured materials. One, without the other diminishes effectiveness).

In summary, the relationship of interpersonal functioning to student outcome indices has been clearly established for elementary and secondary levels, and remedial help at the college level. The exact nature of the relationship has not been determined for higher education students who are not in a remedial situation. One hope of the current research project is to begin to shed some light on the proportions of the ingredients which maximize the facilitative learning relationship between student and tutor in distance education.

DESIGN

The goal of the training program then became clear; to delineate and teach specific communication skills that will enable tutors to effectively help their students solve their learning problems, be they content specific or related to the students' entire learning milieu. The training program integrates seven specific communication skills into a problem solving sequence. The sequence consists of three phases: a) exploring the SITUATION;

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b) understanding the CAUSES or reasons, and; c) developing a DIRECTION or course of action.

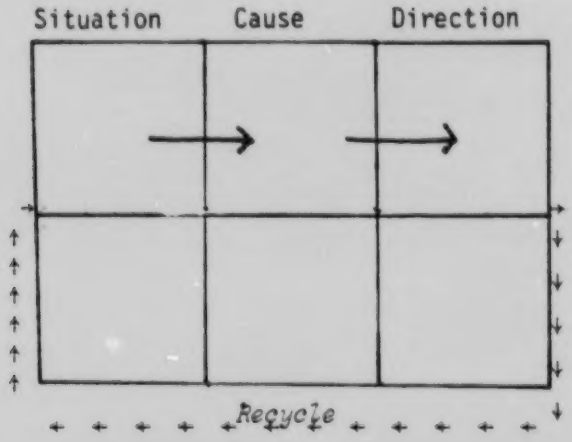

FIGURE 2

The seven skills are divided into two skill domains: 1) communicating an understanding of the student's perspective, and; 2) communicating your own perspective. Communicating an understanding (CU) should always precede communicating your perspective (CP).

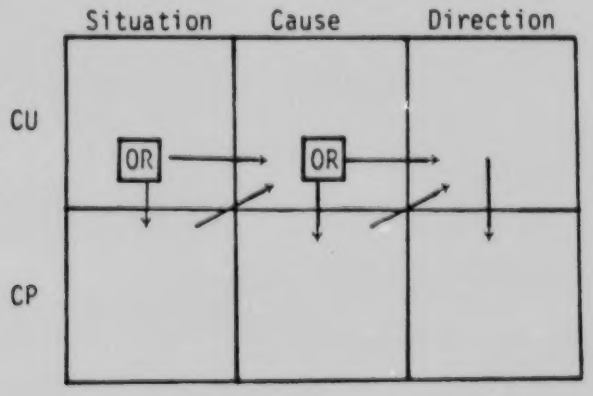

FIGURE 3

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The specific skills within communicating understanding are:
1) communicating your interest in the student as a person (CI);
2) asking facilitative questions, direct and open-ended (FQ), and;
3) reflecting the content of the student's verbal message which may include feelings (R). They fit into the problem-solving model as in Figure 4.

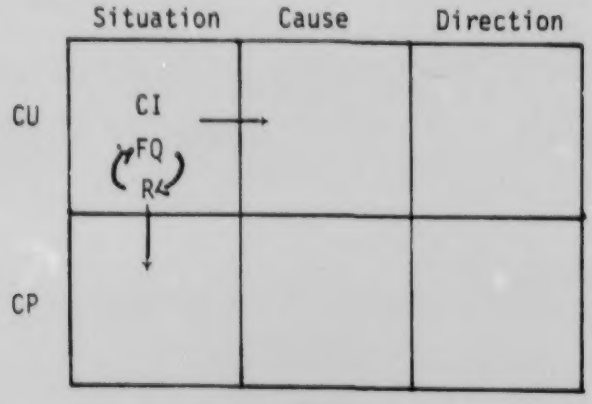

FIGURE 4

The skills of communicating your perspectives are:
1) genuinely expressing your feelings about the student (G);
2) disclosing experiences you have had yourself or that other students have had (E-D); 3) providing descriptive feedback (DF), and; 4) confronting constructively with behavioural discrepancies (C). They fit into the problem-solving model as in Figure 5.

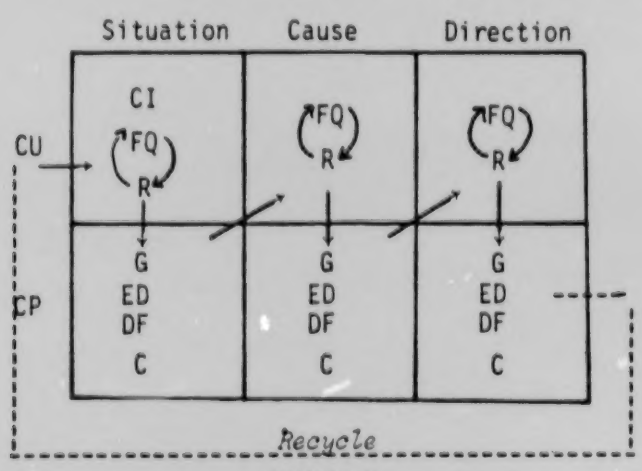

FIGURE 5

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The skills of communicating understanding are most effectively used serially, i.e. asking a facilitative question should be followed up with a reflection of the student's response to that question. The skills of communicating your perspective have no given order of use and are used at the tutor's discretion either singly, in combination with each other or in combination with FQ or R. The whole process is cyclical. For a more thorough explanation of this model, see the manual, Communication Skills for Tutors Workshop, Athabasca University (1980).

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III STUDY #1 PILOT GROUP OF TUTORS

The Athabasca University tutor has been described by many as the central link between the university and the learner. The influence that tutors have over learners, both instructionally and motivationally, is undoubtedly an important component at Athabasca. The tutor training project attempted to determine if tutor training as previously described can improve the relationship between the tutor and the learner in ways which maximize learner success and completion rates.

The pilot project involved training a group of volunteers in the interpersonal communication skills previously outlined. Pre- and post-levels of functioning were measured through written and audio tape recorded means. A follow-up phase of monitoring and feedback was carried out for three months. This procedure consisted of: 1) evaluating an audio tape submitted by each of the participant tutors each month; 2) providing each tutor with written descriptive feedback, and; 3) making a follow-up phone call for purposes of discussing the written feedback.
The research questions asked of this pilot study were:

a) How desirable will a skills training program be to tutors?
b) What is the current interpersonal functioning of AU tutors?
c) How effective is the training in changing tutor behaviour on the following indices:

1. the ratio of tutor-to-student talk time
2. the ratio of indirective to directive tutoring techniques used
3. the overall interpersonally facilitative conditions offered by the tutor

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d) What effect does the trained tutor have on student indices of success such as:

1. completion
2. rate of progress
3. exam grades

IS THE CONCEPT OF TUTOR TRAINING DESIRABLE?

A blanket invitation went out to all tutors at Athabasca University, both old and new, in October 1979, at the annual orientation. At the time there were 72 part-time tutors. Thirty-one (31) expressed interest in participating (43%). To accommodate the greatest number of tutors and to provide an opportunity for a field test-revision-field test on the content of the training program, two workshops were scheduled, the first in November and the second in January. (The data has been combined for ease of presentation).

Due to involvement in other REDEAL projects, five tutors were eliminated. Two of these in addition to another tutor were asked to serve as control subjects. Each control tutor made an audio tape recording of a tutorial phone call, but did not receive training or any other information about the skills workshop. Twelve tutors dropped out before the workshop for various reasons: seven because of time problems or family emergency, 2 because of no renumeration, and 3 due to other personal reasons. The remaining 13 tutors (18% of tutor population) participated to varying degrees. All 13 attended one day of the two-day workshop. Nine (12.5% of total tutor population) attended both days of the workshop. Only five (7%) participated fully by turning in the pre- and post-training written test, the workshop evaluation and the pre- and post-training audio tapes of telephone tutorial sessions.

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The thirty-one initial volunteers represented experienced tutors (31%) and new recruits (61%). The tutors who participated fully (N=5) were composed of 80% new tutors and 20% experienced. The "drop-outs" were composed of 42% experienced and 58% new recruits.

Despite a lack of participation, tutor training seems to have been found attractive by both experienced and new tutors. Almost one-half of all tutors expressed interest in participating even though the workshop was entirely voluntary and no monetary or other incentives were offered for participating.

Another index demonstrating the desirability of the training program to the tutors was obtained by a questionnaire administered at the conclusion of the workshop (see Appendix B). The questionnaire asked the tutors to rate their pre- and post-workshop feeling of the importance of each skill presented, their functioning on each skill (pre and post) and their feeling of the value of the workshop. Refer to Table 1.

	TUTORS	INCREASE IN PERCEIVED IMPORTANCE OF THE SKILLS		PERCEPTION OF SKILL INCREASE	VALUE OF WORKSHOP
		COM. UNDER.	COM. PERSP.		
Workshop II	1	++	±	±	++
	2	++	++	+	++
	3	++	++	±	++
	4	++	++	++	++
	5	+	±	+	+
Workshop I	6	+	±	+	+
	7	+	±	+	+

N = 7 WORKSHOP I, N = 3 WORKSHOP II, N = 4

RATING SCALE ++ (great increase) + (increase) ± (no change) - (decrease) -- (great decrease)

TABLE I

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All the tutors felt the workshop made them more aware of the importance of communicating to the student an understanding of his/her perspective. Forty-three percent (43%) of the tutors felt that the skills of communicating their perspective had gained in importance as a result of the workshop, while 57% reported no change. (It is interesting to note that all three Workshop I participants reported no change on this dimension. Workshop I did not focus much attention on these skills. Workshop II, the revised form, did). Seventy-one percent felt their skills had increased, 29% felt they had not increased. The 29% (two tutors) noted elsewhere in the questionnaire that they felt they would require more practice before they would feel comfortable claiming a gain. All the tutors rated the workshop as valuable to them in improving their skills (100%).

WHAT IS THE CURRENT INTERPERSONAL FUNCTIONING OF AU TUTORS?

The level of functioning of tutors here refers to the quality of the verbal interaction between tutor and student during telephone conversations. To ascertain this measure, each participating tutor (N=6) and the control groups (N=3) plus another group of non-volunteers. (N=3) tape recorded an evening's tutorials. The tutors taped calls of their choosing.*

These tapes were then rated on four scales, one of which is an analysis of the verbal interaction, and the other three have to do with the interpersonal communication skill level of the tutor.

*Students were asked their permission. A Sony TP-5T telephone microphone was used. The tapes were listened to only by the project coordinator and another rater so confidentiality was maintained. The tapes will be put to no other use and will be destroyed at the end of the project. Certain segments of tapes will be retained with permission of both tutor and student to develop a training tape.

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Scale 1 (Appendix C) developed by the project coordinator and based on the skills taught in the workshop, is designed to describe the verbal interaction between tutor and student. The user categorizes what is being said by making a "rating" every three seconds. In this way it can be determined (approximately) the percentage of time certain behaviours described on the scale occur. The procedure during rating is to: 1) listen to three randomly selected three-minute segments of the tutorial, and; 2) categorize what is being said into one of the ten categories of the scale. The ratings are then tallied to determine the overall percentage of time each behaviour occurs. The analysis of the scale data yields three very important dimensions of tutoring: 1) student/tutor talk ratio; 2) use of indirect versus direct tutoring methods; and 3) use of the problem solving model. The tutor/student talk ratio reflects the percentage of time each person spends talking. This is important because more student talk time means more active involvement on the part of the student. Similarly, it has been found that learning and motivation increase with more active involvement on the part of the student. (Aspy and Roebuck, 1978) So, for example, question-answer and dialogue are superior to lecture in terms of student participation.

The indirect/direct ratio refers to the style of tutoring. Indirect methods emphasize questionning, reflecting student ideas and feelings, and praising. Influencing student's learning through indirect methods seems to encourage a more self-directed learning style. Self-directed learning is a major goal in adult education according to Knowles (1975).

The other three scales used were Carkhuff's scales for the

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measurement of: 1) Emphatic Understanding in Interpersonal Processes; 2) the Communication of Respect in Interpersonal Processes, and; 3) Facilitative Genuineness in Interpersonal Processes. Each of these is a five-point scale "moving from the communication of none of the conditions (level 1.0) to the full and simultaneous communication of all of the general conditions of empathy, respect, and genuineness". (level 5.0)(Carkhuff, 1969). Level 3.0 has been established as offering mainimally facilitative levels of the conditions. Carkhuff (1969) reviews the research as follows:

"The literature with regard to both process and outcome in helping indicates the critical nature of the helper's level of functioning. The accumulated evidence from a number of naturalistic studies is extensive and consistent: helpees of high-level-functioning helpers demonstrate constructive change on a variety of indexes while those of low-level-functioning helpers do not change or even deterioriate (Berenson & Carkhuff, 1967; Carkhuff & Berenson, 1967; Rogers, Gendlin, Kiesler, & Truax, 1967, Truax & Carkhuff, 1967).

More specifically, the predictive evidence is similar for counselling and psychotherapy (Pagel, Carkhuff, & Berenson, 1967), education (Aspy, 1969; Aspy & Hadlock, 1969; Kratochvil, Carkhuff, & Berenson, 1969), supervision (Pierce, 1969), and parent-child treatment (Carkhuff & Bierman, 1969). One study (Pagell et al., 1967) searched a variety of indexes of possible client gains in interpersonal functioning over therapy, including expert, therapist, helpee, and self-ratings as well as objective ratings prior to and following the helping process. Those therapists who were functioning both (1) above minimally facilitative levels and (2) at least a level above their clients had clients who demonstrated the greatest growth in interpersonal functioning.

The results of another study (Kratochvil, Aspy, & Carkhuff, 1967) have taught us that the directionality of movement, when such changes are significant, may in some cases be more critical than the absolute level of functioning: counselors and therapists who demonstrate significant growth movement from the beginning to the end of helping will have clients who demonstrate constructive change; those helpers who decline in functioning over the course of helping will have helpees who decline.

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Another source of learning concerning the effects of helper level of functioning has been the process studies in which helper level of functioning was manipulated and the effects upon helpee functioning studied. In studies of both inpatient schizophrenics (Cannon & Pierce, 1968; Truax & Carkhuff, 1965) and low-level-functioning college students (Holder, Carkhuff, & Berenson, 1967) it was found that relatively high-level-functioning helpers influenced the low-level-functioning helpee's level of functioning by the level of facilitative conditions they offered. When the helper offered high levels of conditions the helpee explored himself at high levels; when the helper offered low levels of conditions the helpee explored himself at low levels. Similarly, when we introduce low-level-functioning helpers (Piaget, Berenson & Carkhuff, 1967) we find different effects upon low-level-functioning helpees, with the low-level helper tending to pull low-level helpees down toward his modal level of functioning over time. These studies have implications for the progress of helping. *The high-level-functioning helper engages all of the helpee's resources in a process that culminates in the helpee's constructive growth. The low-level-functioning helper involves the helpee in a subtractive process that results in deterioriation over time.*"

Empathy is the key ingredient of helping whether it be counselling or teaching (Aspy, 1972). It must be communicated explicitly, especially during the early phases of tutoring to establish a foundation upon which to build a meaningful learning relationship. Without an empathic understanding of the student's situation there is little basis for helping. In evaluating empathic conditions, we concentrate initially on the interchangeability of the communications of tutor and student. (level 3.0). That is, does the tutor express essentially the same feeling and content that the student is communicating? If either part is left out of the communication or is distorted, it subtracts from the student's expression (See Scale 2, Appendix C).

The dimension of respect is often incorporated within a high level of empathy, but it can be communicated even in the absence

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of empathy. Respect rests on the tutor's openness to the possibility that the student can act constructively to solve his or her own learning problems. High levels of respect demand that the tutor be willing to let the students fumble a little in their initial attempts to learn, not jumping in too quickly to correct, but rather allowing students time to figure out solutions. (See Scale 3, Appendix C).

One of the most important contributions of facilitative genuineness is the respect it conveys. Depending on the persons and other conditions involved, a tutor's level of facilitative genuineness and self-disclosure may communicate a great deal of respect. We are usually most genuine with those for whom we care most. At a minimum, tutors must sound as if they mean what they are saying; they must be sincere, (See Scale 4). For a more thorough discussion of these scales and their use, see Carkhuff, (1969).

The procedure for rating with these scales was to listen to three, three-minute segments and discriminate a rating on each of the three scales for each segment. The ratings were then averaged together to yield a score for the mean facilitative conditions offered by each tutor.

The data for tutors at Athabasca University is presented below. The mean level of facilitative conditions (FC) offered by untrained tutors is 1.9 with a low of 1.5 and a high of 2.2. The mean tutor/student talk ration (T/S) for untrained tutors is 56% tutor, 40% student, 4% silence or confusion with a low of 75/24/1 and a high of 51/64/5. The mean proportion of indirect versus direct methods (I/D) employed by all untrained tutors is 25% indirect, 75% direct,

.../20

with a low of 4/96 and a high of 63/37. See Table 2 below.

TABLE 2

		RANGE		
	$\bar{X}$	LOW	HIGH	
Facilitative Condition	1.9	1.5	2.2	
Tutor/Student Talk	56/40	75/24*	31/64*	(N=12)
Indirect/Direct Methods	21/29	4/96	63/37	

*Low T/S refers to least facilitative ratio; high T/S to most facilitative ratio

The facilitative conditions offered by AU tutors are significantly below minimally facilitative levels. (1.9 VS. 3.0). They are not, however, unusual for an untrained population. But they do indicate a real need for training.

The tutor/student talk ratio reflects the predominance of tutor talk. In adult education this should not be so. As Knowles explains, (1975), pedagogy literally means "teaching children". Traditionally, pedagogy has been teacher directed. Knowles poses the term "androgogy" to refer to teaching adults for whom teacher directed learning is inappropriate. Instead, they must learn to become self-directed learners and the teacher must have skills to facilitate growth in that direction.

When listening to the tapes, it is evident that the students desire to talk more, but the unskilled tutor is unable to generate a student dominated productive conversation. A more facilitative ratio seems to be 35% tutor to 65% student or 35% tutor, with 40% student, and 25% silence (approximately) used as thinking time. Silence, a productive medium for thinking, is underused during the telephone tutorials at Athabasca. An optimal ratio cannot be determined without further research.

The indirect/direct ratio reflects a too-teacher directed style to facilitate and/or encourage student self-direction. To become self-directed, students must learn to solve their own learning problems, not rely on the tutor to provide the answer. A direct teaching/ tutoring style relies on lecture and explanation as opposed to an indirect style which emphasizes a questionning-guiding approach. Our tutors, as the research indicates most tutors and teachers do, rely heavily on directive techniques.

In summary, the untrained tutors at Athabasca (and they are no different from the general population helpers anywhere) probably detract (as based on implications from past research) more than they add to the distance education learning experience.

HOW EFFECTIVE IS THE TRAINING?

The question of training program effectiveness can be addressed two ways: 1) were the trainees able to learn the skills and perform them under the controlled conditions of the workshop, and; 2) were they able to translate the skills to the actual job conditions and alter their interactive pattern? Question 1 was answered via the written pre- and post-tests and question two's answer was derived

.../22

from the ratings of the audio taped tutorial sessions.

Written Test: The same test was administered before and after the workshop. The questions called for the participants to demonstrate in writing how they would handle certain situations in tutoring. Additionally, their overall approach to tutoring was queried. The tests were rated on a 1-to-5 scale of effectiveness of response as follows:

1.0 very ineffective
2.0 ineffective
3.0 minimally effective
4.5 effective
5.0 very effective

Half levels were employed in the rating (e.g. 1.5, 2.5).

The data presented here is from the five tutors who attended Workshop II and have complete (or nearly complete) data. The responses to questions are summarized under the headings, "ability to communicate understanding of student's perspective"; "ability to constructively communicate own perspective"; and "level of sophistication of a tutoring strategy". (See Appendix D for sample test).

The skill level of communicating understanding increased for all tutors (100%). The skill level of communicating perspective for two-thirds (67%) and decreased for one-third (33%). The level of sophistication of a tutoring strategy increased for all tutors (100%). (See Table 3).

TABLE 3

TUTOR	ABILITY TO CU		ABILITY TO CP		SOPHISTICATION OF TUTORING STRATEGY	
	Pre	Post	Pre	Post	Pre	Post
1	1.25	2.5	3.0	4.0	2.0	4.0
2	1.5	2.75	3.0	3.5	1.0	4.0
3	1.75	3.5	4.0	3.0	2.0	4.5
4	-	3.5	-	3.5	-	5.0
5	2.0	2.5	1.5	1.0	1.5	3.5

.../23

In summary, it is apparent that the workshop was effective in in raising the skill levels of the tutors. The fact that two tutors (29%) were less effective communicating their perspective on the post-test indicates a weakness in that area of the training program. This has been addressed in the revised training manual.

Audio Tapes: Each tutor made an audio tape recording of a live telephone tutorial session before coming to the workshop. After the workshop, the tutors were to make one tape recording per month for the next three months. This activity constituted the follow-up phase of the training. All five tutors made at least the pre-tape and one post-tape, two made two post-tapes and two made all three-post tapes. It is from the data on these tapes that the answer to question two can be found. The tapes were rated by the methods previously discussed in the section on current functioning.

The data for each tutor will be presented in case study fashion along with summary data on all five tutors combined for each of the critical tutoring dimensions; tutor/student talk, (T/S) indirect/direct instructional methods (I/D) and interpersonally facilitative conditions (FC). Additionally, the frequency of use of each of the skills taught in the workshop will like-wise be presented.

Figure 6 displays the changes in tutor behaviour on the tutor/student talk ratio in bar graph form. The mean percentage of talk time for all tutors combined declined every month (see graph 6) from a pre-training ratio of 59% tutor/37% student talk to the reverse-39% tutor/56% student talk. Some of the tutors were able to alter this pattern more consistently and dramatically than others, but each tutor improved over his/her pre-training condition by reducing the amount of time he/she talked and increasing his/her student's talk time.

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Figure 6

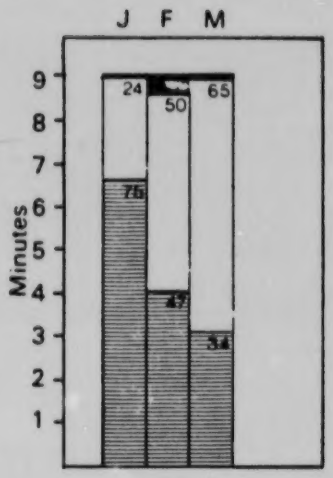
Tutor/Student Talk

Numbers in bars indicate the percentage of time

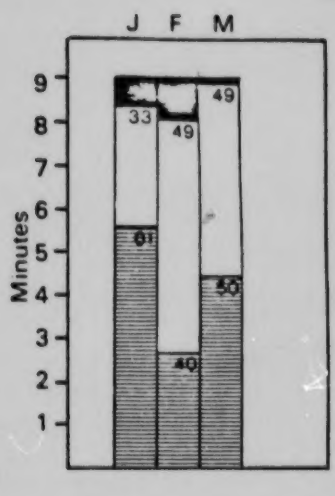
Silence/confusion

Student talk

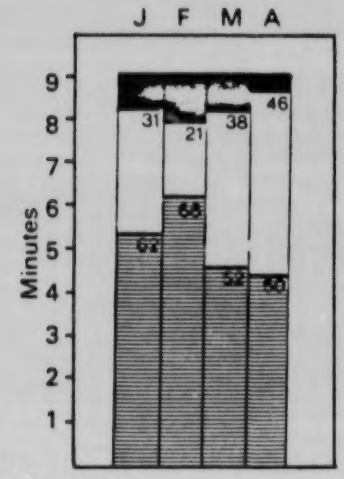
Tutor talk



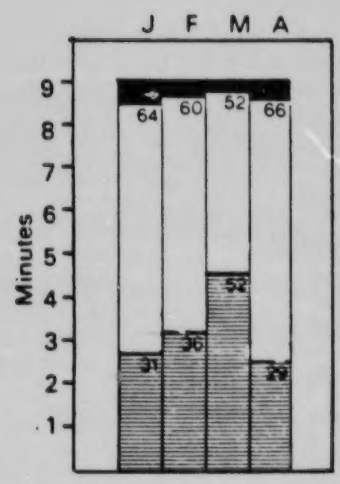
Tutor 1



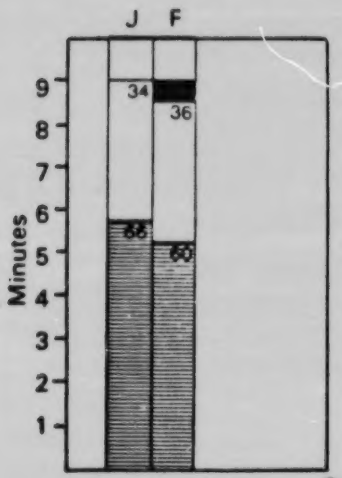
Tutor 4



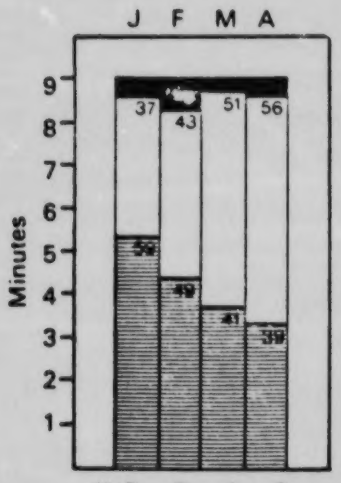
Tutor 2



Tutor 5



Tutor 3



$\bar{x}$ for All Tutors

N=5 5 4 2

It has been previously stated in this report that a facilitative tutor talk percentage is around 35%. This does, of course, vary by course structure and content, and type of problem encountered. However, figures of 35% were achieved by tutors in such varying courses as Accounting, Literature, and Psychology.

In conclusion, the trend for the training to be effective in helping tutors encourage more student talk is clearly displayed.

Figure 7 similarly presents the data on changes in tutors' instructional style from predominantly direct to more indirect. The average percentage of the tutor's statements employing indirect methods was 17% and direct methods, 83% before training. This was reflective of tutor behaviours such as explaining, lecturing, giving advice and talking about themselves. After training the percentage of indirect methods got as high as 40%. All but one tutor improved on this dimension, some very dramatically and most with consistency.

To understand how the changes on T/S and I/D were made possible, it will be helpful to examine the frequency of occurrance of the individual skills which compose the training workshop. These frequencies were determined using Scale 1. Tables 4, 5, 6, 7, and 8 show the percentage of occurrance of each of the seven skills for each of the 5 tutors. (Facilitative questions are broken down into direct, category 2 and open-ended, category 3. Reflecting is broken down into reflecting feelings, category 4 and reflecting content, category 5. Category 7, asking leading questions is not a skill, but rather a pitfall to be avoided).

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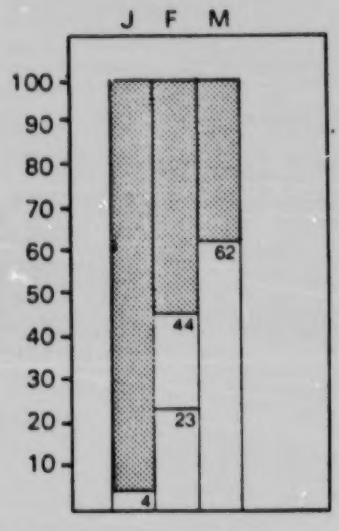
Figure 7

Indirect/Direct Methods

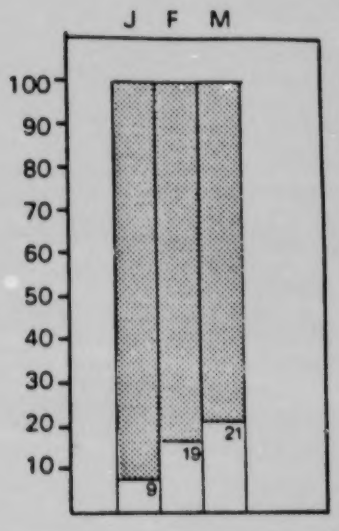
Numbers in bars indicate the percentage of tutor comments

Indirect

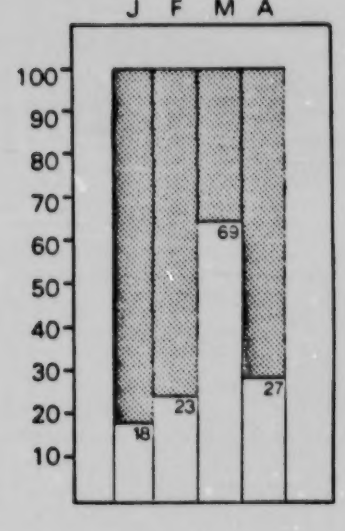
Direct



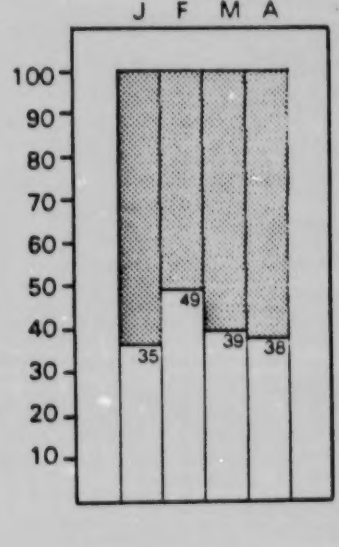
Tutor 1



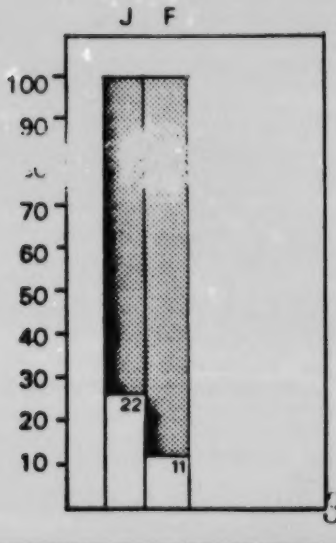
Tutor 4



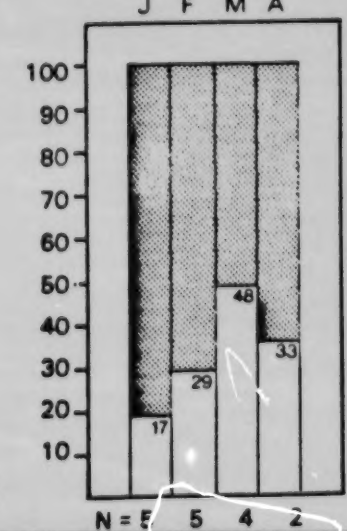
Tutor 2



Tutor 5



Tutor 3



All Tutors

N = 5 4 2

PERCENTAGE OF OCCURENCE OF SKILLS BY MONTH

SKILL	JAN.	FEB.	MAR.	APR.
1 C.I.	-	6	10	
2 D.Q.	2	7	8	
3 Q.Q.	2	15	16	
4 R.F.	-	-	-	
5 R.C.	-	2	18	
6 G	-	15	10	
7 L.Q.	-	-	-	
8 E-D	-	16	21	
9 D	96	39	16	
10 C	-	-	-	

TABLE 4 TUTOR 1

SKILL	JAN.	FEB.	MAR.	APR.
1 C.I.	-	1	3	-
2 D.Q.	11	6	38	15
3 Q.Q.	1	-	13	2
4 R.F.	-	2	1	-
5 R.C.	-	3	2	1
6 G	4	9	12	9
7 L.Q.	2	2	1	2
8 E-D	-	8	-	18
9 D	82	67	30	49
10 C	-	-	-	3

TABLE 5 TUTOR 2

SKILL	JAN.	FEB.	MAR.	APR.
1 C.I.	11	-		
2 D.Q.	-	4		
3 Q.Q.	-	3		
4 R.F.	2	1		
5 R.C.	3	-		
6 G	6	3		
7 L.Q.	2	-		
8 E-D	5	32		
9 D	71	58		
10 C	-	-		

TABLE 6 TUTOR 3

SKILL	JAN.	FEB.	MAR.	APR.
1 C.I.	1	10	4	
2 D.Q.	2	6	5	
3 Q.Q.	2	-	5	
4 R.F.	1	1	3	
5 R.C.	2	-	3	
6 G	2	3	4	
7 L.Q.	-	-	-	
8 E-D	10	25	36	
9 D	80	54	42	
10 C	-	1	-	

TABLE 7 TUTOR 4

SKILL	JAN.	FEB.	MAR.	APR.
1 C.I.	15	-	5	-
2 D.Q.	-	6	7	6
3 Q.Q.	6	14	16	13
4 R.F.	-	-	1	-
5 R.C.	6	12	2	8
6 G	12	17	7	11
7 L.Q.	[illegible]	2	1	-
8 E-D	21	3	4	15
9 D	35	44	57	47
10 C	-	-	-	-

TABLE 8 TUTOR 5

PERCENTAGE OF OCCURENCE OF SKILLS BY MONTH

SKILL	JAN.	FEB.	MAR.	APR.
1 C.I.	-	6	10	
2 D.Q.	2	7	8	
3 Q.Q.	2	15	16	
4 R.F.	-	-	-	
5 R.C.	-	2	18	
6 G	-	15	10	
7 L.Q.	-	-	-	
8 E-D	-	16	21	
9 D	96	39	16	
10 C	-	-	-	

TABLE 4 TUTOR 1

SKILL	JAN.	FEB.	MAR.	APR.
1 C.I.	-	1	3	-
2 D.Q.	11	6	38	15
3 Q.Q.	1	-	13	2
4 R.F.	-	2	1	-
5 R.C.	-	3	2	1
6 G	4	9	12	9
7 L.Q.	2	2	1	2
8 E-D	-	8	-	18
9 D	82	67	30	49
10 C	-	-	-	3

TABLE 5 TUTOR 2

SKILL	JAN.	FEB.	MAR.	APR.
1 C.I.	11	-		
2 D.Q.	-	4		
3 Q.Q.	-	3		
4 R.F.	2	1		
5 R.C.	3	-		
6 G	6	3		
7 L.Q.	2	-		
8 E-D	5	32		
9 D	71	58		
10 C	-	-		

TABLE 6 TUTOR 3

SKILL	JAN.	FEB.	MAR.	APR.
1 C.I.	1	10	4	
2 D.Q.	2	6	5	
3 Q.Q.	2	-	5	
4 R.F.	1	1	3	
5 R.C.	2	-	3	
6 G	2	3	4	
7 L.Q.	-	-	-	
8 E-D	10	25	36	
9 D	80	54	42	
10 C	-	1	-	

TABLE 7 TUTOR 4

SKILL	JAN.	FEB.	MAR.	APR.
1 C.I.	15	-	5	-
2 D.Q.	-	6	7	6
3 Q.Q.	6	14	16	13
4 R.F.	-	-	1	-
5 R.C.	6	12	2	8
6 G	12	17	7	11
7 L.Q.	6	2	1	-
8 E-D	21	3	4	15
9 D	35	44	57	47
10 C	-	-	-	-

TABLE 8 TUTOR 5

Category 3, asking facilitative, open-ended questions is the skill most responsible for the changes in T/S and I/D, although category 2, direct question, was also helpful. Scanning the pre-training (January) columns show that no tutor spent more than 6% of the time asking open-ended questions. The average for all tutors was 2.2%. Direct questions accounted for another 3% on average. The March (2 months post-training) tape shows a marked increase with an average of 12.5% of comments being open-ended questions (more than a 500% increase) and 14.5% being direct questions (more than a 400% increase). Table 9 shows the mean percentage by category for all tutors.

SKILL	JAN.	FEB.	MAR.	APR.
1 C.I.	5.4	3.4	5.5	
2 D.Q.	3	5.8	14.5	(NSD)
3 O.Q.	2.2	6.4	12.4	
4 R.F.	.6	.8	1.25	
5 R.C.	2.2	3.4	6.25	
6 G	4.8	9.4	8.25	
7 L.Q.	2.0	.8	.5	
8 E-D	7.2	16.8	15.25	
9 D	72.8	54.4	36.25	
10 C	0	.6	0	

TABLE 9 ALL TUTORS

Figure 8 presents six line graphs showing the changes in the mean level of facilitative interpersonal conditions offered by each tutor (graph 1 - 5) and all tutors combined (graph 6).

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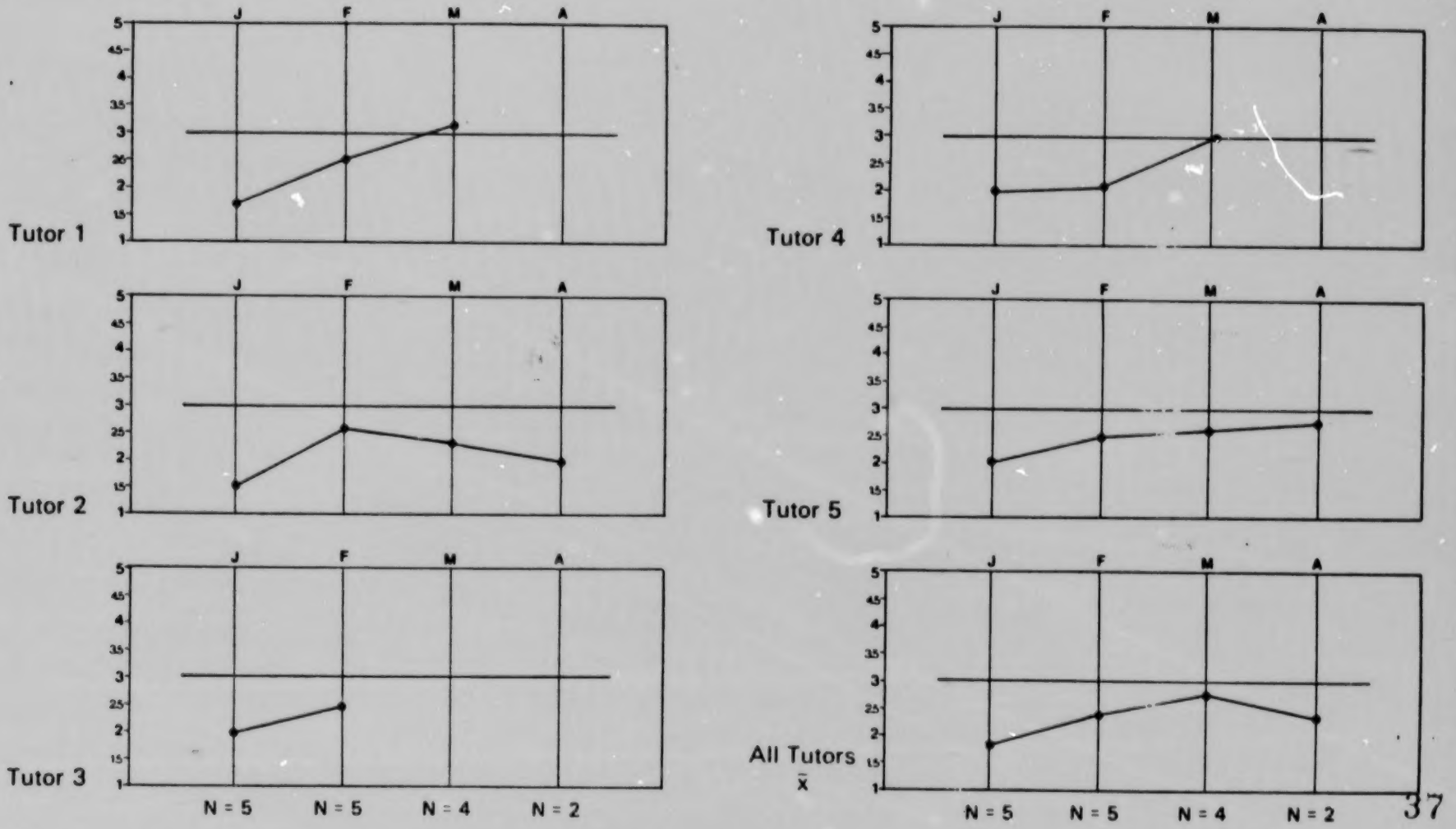
Figure 8

Facilitative conditions index
(Empathy, respect, & genuineness)



The tutors averaged level 1.9 on empathy, respect and genuineness before training. All but one tutor made steady upward progress across the follow-up months. Two tutors rose to the critical threshhold, level 3.0, minimally facilitative. All tutors got to 2.5 which means they are capable of reaching 3.0 but have not as yet "put it all together". That is, they can reflect and show respect for the feelings and experiences of the student, but do not do so consistantly nor all at once.

At this point it would be productive to explain the meaning of the differences between levels on the Carkhuff scales. While the scales are only five points, when decimals are added (e.g. 2.5, 2.6 which can be discriminated by highly trained raters) a 40-point scale is obtained. Thinking of it this way will give a better mental set for the meaning of gains of.5. Each half level describes meaningful differences in behaviour and skill. So, for example, a person operating at 1.5 is significantly and meaningfully different from someone at 2.0, and 2.0 is significantly and meaningfully different from 2.5. Consequently, a trainee increase of .5 constitutes a significant and meaningful gain in skill. Looking back at the data in Figure 8, graph 6, the tutors, on the average, gained .88 from January (Pre-) to March (2 months post-training). (April is not being used due to the small N=2). This change again supports the conclusion that the Athabasca University tutor skills training program is effective in enabling tutors to use new skills to change their on-the-job practices with students - for the better.

The problem solving progression itself is the final aspect of tutoring that was examined. The model assumes that all learning and therefore, problem solving, goes through the phrases of: 1) exploring the situation or problem area; 2) understanding

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the reasons and/or causes that underlie the situation (whether it be content specific, motivational or organizational) and;
3) developing a direction to take to solve the problem or prevent its recurrence. This is the superstructure within which the Communications are used during a tutorial session.

During the rating procedure on Scale 1, while tutor comments were classified into one of the ten categories, the students' comments were classified into Situation, Cause, or Direction. Thus it was possible to determine to what extent tutors were employing the problem-solving model.

The data shows that the model was not employed fully. The

TABLE 10

	JAN.	FEB.	MAR.
Situation	81%	57%	74%
Cause	1%	17%	11%
Direction	18%	26%	15%

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general profile of untrained tutors is 81% situation, 1% cause (one tutor) and 18% direction. To exemplify this profile, the tutors spend most of the time discussing what's going on for the student, no time trying to determine why this situation exists and a small amount of time determining a course of action. This last phase consists in most cases of telling the students what they should do in relation to the expressed problem, rather than mutual problem solving.

Three months post training, the profile showed the following (March data): 74% situation, 11% cause, and 15% direction. While this is an improvement in percentages, in actual practice, the problem-solving sequence is employed rather randomly. That is, the tutor is not always in control of the process. I believe this finding points to a weakness in the training program at the time of Workshop II and to the difficulty in learning seven skills and a problem-solving sequence in 14 hours.

DISCUSSION

It is clear from the data presented here that tutors at Athabasca are in need of skills training; that they are interested in the prospect of learning skills; that having been through the training they view it positively; that the training is effective in producing increases on the behavioural indices aimed for; and that these gains do translate to the live tutoring situation.

The gains made on the T/S talk dimension are considerable (20% reduction in tutor talk). The gains on the indirect tutoring methods are also considerable (31% increase). The gains on the facilitative index are more than considerable (+.88) and are enough to lead to improvement in student outcome measures (Aspy, 1978). These gains constitute an enormous improvement in the quality of the verbal interaction between tutors and students.

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These levels of functioning, however, are still short of minimally effective as previous research has established.

Two areas showed very little behavioural change; the full use of the problem solving procedure and the skilled use of Descriptive Feedback. The low percentage of time spent in Cause and Direction and the unsystematic employment of the sequence indicates that the time allowed during the workshop was insufficient to master this very critical process. The importance of guiding the students through the problem-solving model cannot be underestimated for it is this process that the literature suggests can help AU students become self-directed learners. The basic skills will not be as effective without being employed systematically to solve the problems and teach the students how to solve problems on their own.

Descriptive feedback was also not used skillfully. The percentage of time spent in category 9 on Scale 1 would seem to indicate that it was, but this percentage was artificially inflated by the inclusion of advice, lecture, and explanation. The rater adopted this policy for ease of rating. The actual skill of providing descriptive feedback to students was infrequently used as defined in the Training Manual.

The limited improvements in both the above skill areas are attributable to underemphasis in the workshop and time constraints of the study. Increasing the overall gains made will require a revamped training program. Revisions to the content of the training have already been made but additional changes must be made in the two-day workshop format. This proposal will be discussed more fully in the section, Conclusions and Recommendations.

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Finally, while 43% of all tutors expressed an interest in participating voluntarily in the training pilot phase, only 12% actually did participate. This heavy fall off perhaps points to a weakness in the organizational plan for implementation. It appears pertinent that an implementation strategy must be designed to improve the attendance by tutors in an ongoing training program. Particular attention should be paid to the involvement of coordinators in the total plan.

IV STUDY #2 RELATIONSHIP OF TUTOR SKILLS TO STUDENT OUTCOME

DESCRIPTION

It was not possible to collect any data on the effects of the changes in the trained tutors on indices of student success due to the short duration (four months) of the data collection period. Such data (completion, rate of progress, and grades) can be obtained in another six months.

The absence of this data, and its crucial importance to the question of the efficacy of tutor training lead the researchers to look for this relationship elsewhere.

For this study, a course was selected which had three tutors with approximately the same number of students. Detailed student progress information was being kept and it indicated that the tutors were achieving different student completion rates. The investigators decided to assess the interpersonal communication skills of these tutors to see if differences on these measures could account for the differing rates of student progress.

The three tutors volunteered to tape record several telephone tutorials with informed consent from the students. They submitted these tapes to the project coordinator for analysis. Five rating scales were employed in the analysis, the three Carkhuff scales for the Assessment of Interpersonal Functioning of Empathy, Respect and Facilitation Genuineness; Flander's Interaction Analysis; and a scale for the measurement of cognitive level of functioning in a learning situation.

The Flander's and cognitive scales are designed to describe the

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interaction between teacher (tutor) and student. Both scales categorize what is being said by making a "rating" every three seconds. In this way it can be determined (approximately) the percentage of time certain behaviours described on the scales occur. An examination of the scales before further reading will make the following discussion more meaningful. (See Appendix C).

The Flander's scale examines the verbal interaction that is taking place in the classroom, and the cognitive scale tries to get at the type of thinking process that is happening. The procedure during rating is to: 1) listen to three randomly selected three-minute segments of the tutorial; 2) categorize what is being said into one of the ten categories of the Flander's scale; 3) listen to the same segment again and categorize the verbal interaction on the cognitive scale. The ratings are then tallied to determine the overall percentage of time each behavior occurs.

The analysis of the Flander's scale yields two very important dimensions of teaching: 1) tutor/student talk ratio, and; 2) use of indirect versus direct tutoring methods. The tutor/student talk ratio reflects the percentage of time each person spends talking. This is important because more student talk time means more active involvement on the part of the student. Similarly it has been found that learning and motivation increase with more active involvement on the part of the student. So, for example, question-answer and dialogue are superior to lecture in terms of active student participation.

The indirect/direct ratio refers to the style of tutoring. Indirect methods emphasize questioning, using student ideas, praising and reflecting ideas and feelings expressed by the students. Influencing student's learning through indirect methods enhances achievement and seems to encourage a more self-directed learning style. Flanders 1964, Amidon and Flanders 1951, La Shier 1966, Campbell 1968).

The Flanders scale, while doing a good job of describing the tutor's

behaviour, does not discriminate the level of cognitive sophistication. Consequently, another scale is needed to ferret out this information. The cognitive scale divides thinking into lower order (level one of Bloom's taxonomy) and higher order (levels two - six) (Aspy, 1972). Lower order thinking includes recalling, defining, identifying--straight memory work. Higher order thinking includes interpretation, application, analysis, synthesis and evaluation. The relationship pointed out by the research here is that the teacher's modelling of higher order thinking seems to translate to students engaging in more higher order thinking. That is, the more the tutor demonstrates analysis, etc., the more the student engages in like behaviour (Aspy and Roebuck, 1978).

Category 9 on the congitive scale includes all non-cognitive interactions (socializing, discussing feelings, etc.) and category 10 on both scales represents periods of silence and/or two talking at once. For a discussion of rating with the Carkhuff scales, see p.28 of this report.

The tutors involved in this study all began tutoring in September, 1979, so all were equal in tutoring experience. None of the tutors had received tutor training and students had been randomly assigned. After ten months, their student completion rates (by credit) were calculated. The data appears in Table 11.

		CREDIT					
TUTOR	Stu N	1	2	3	4	5	6
1	36	42%	17%	11%	6%	3%	3%
2	39	62%	36%	28%	8%	5%	3%
3	37	65%	38%	30%	8%	8%	3%

TABLE 11

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Tutor 3 has the highest completion rate for each credit. Tutor 2 is slightly behind tutor 3 and tutor 1 has only one-half the completion rate of the other two tutors. It should be noted that a six credit course officially requires 12 months for completion. Preliminary findings on completion rates for tutors, however, indicate a much longer time period of approximately 24 months is necessary before an accurate reading on student completion can be determined. The profiles of the tutors in the course under study here, were somewhat different than they were just 2 months ago with tutor 3 far ahead of tutors 1 and 2, although the rank order was the same. This suggests that rate of progress is a different dimension and may rest on different tutoring skills than completion. Caution is required in interpreting this data at such a preliminary stage, as the profiles may change in 6 to 12 months time.

The tape ratings on the Carkhuff scales yielded facilitative indexes of 1.75, 1.66 and 1.83 respectively for tutors 1, 2, and 3 and are presented in Table 12.

	EMP.	RESP.	GEN	$\overline{X}$FC
Tutor 1	1.75	2.0	1.5	1.75
Tutor 2	1.25	2.0	1.75	1.66
Tutor 3	1.5	2.0	2.0	1.83

TABLE 12

These scores are interpreted to mean no differences among the tutors in the levels of interpersonal communication skills. They are all in the very ineffective range, and the differences between them are non-meaningful. Their scores are consistent with the mean for untrained tutors at Athabasca (FC = 1.9). What then accounts for the dramatic differences in student progress?

The data from Flander's interaction analysis ratings show that tutor 3 has a distinctly different verbal interaction pattern. On the tutor/student talk index, tutors 1 and 2 are consistent with the mean of all untrained tutors at AU, 56% tutor/40% student, 4% silence/confusion. Table 13 shows that tutor 3 had 39%T/34%S/27%SC,

TUTOR	TUTOR TALK	STUD. TALK	S/C
1	51%	46%	3%
2	51%	48%	1%
3	39%	34%	27%

TABLE 13

Derived from Flander's Interaction Analysis

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This pattern reflects a good deal more active student participation than the more common pattern. The 27% silence was used as thinking time by the student and tutor in working through a problem. Checking back to Table 11, it can be seen that tutor 3 has the highest student rate of progress.

The other index from the Flander's scale is the ratio of indirect to direct instructional methods used. On this index the three tutors also differed from each other, but only slightly. Tutor 1 uses the most indirect methods, tutor 2 comes next and tutor 3 is lowest. All, however, are basically directive in their tutoring style, and all 3 tutors are lower than the mean for A.U. tutors which is 21%I/79%D. This suggests their differential employment of I/D methods is <u>not</u> what accounts for the differing effect they have on students. Table 14 displays this data.

TUTOR	INDIRECT	DIRECT
1	18%	82%
2	13%	87%
3	7%	93%

TABLE 14

% of Tutor Comments

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The cognitive scale yields two indices of importance: 1) the percentage of time spent on higher order thinking processes and lower order thinking processes, and; 2) the percentage of time engaged in non-cognitive discussion. Non-cognitive here refers to topics in the affective domain and/or non-course related. It is on the cognitive scale that tutor 1's profile is substantially different from tutor 2's and 3's. The proportion of time spent by both tutor and student on higher order thinking for tutor 1 is half that of tutor 2 and 3. Table 15 displays the data from the cognitive analysis of the tapes.

TUTOR	HIGHER ORDER	LOWER ORDER	NON-COGNITIVE
1	14%	31%	50%
2	34%	43%	16%
3	29%	24%	15%

TABLE 15

% of Time Spent

The non-cognitive index is by far the most differentiating score. Tutor 1 spent 50% of the phone call time on non-cognitive subject matter. This reflects this tutor's inability to direct the conversation. When the student's conversations drifted to personal problems, the tutor was unable to redirect them to the course material. This resulted in a high proportion of aimless conversation. The other two tutors, in contrast, allowed only a small proportion (15%) of non-cognitive conversation.

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DISCUSSION

The study was carried out to try to determine the effective ingredients of tutoring. We knew when we began this study that the three tutors had differing student rates of progress through the course so we analyzed the interpersonal interaction to see if contributing behavioural variables could be isolated. The tape ratings were done "blind", i.e. without knowledge of which tutor had which student rate of progress.

The tape analyses showed that all three tutors were quite low on the facilitative conditions (FC). Tutors 2 and 3 avoided the affective or personal area by not being responsive when students brought up personal problems. These two tutors had higher student rates of progress. While this finding seems contradictory to our hypothesis that higher facilitative conditions (empathy, respect and genuineness) should relate to higher achievement and more rapid progress, one plausible explanation is this: tutors 2 and 3 had more student success because they stuck to what they knew, i.e. the course material. Tutor 1, who was equally unskilled interpersonally but who tried to deal with the affective area, ended up wasting time that could have been used constructively on course specific issues. Tutor 1's unskilled responses to the personal area seems to have had a detrimental effect on student progress in that they were unsuccessful in redirecting the students' energies to course content.

While this study doesn't substantiate the differential effects of the tutors' interpersonal skill level on studnet outcome measures, it doesn't refute it either. One possible reason for the lack of a relationship is the very low level of functioning (1.66 to 1.83).

The results of this study do, however, lend support to the need for the tutor skills training program. The A.U. training program is designed to offer tutors the skills they need to effectively handle the affective domain of problems while simultaneously leading the students back to the cognitive domain. It is the combination of affective and cognitive

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that the research literature suggests maximized learning. (Aspy 1978, Berenson, Carkhuff, Berenson & Pierce, 1977).

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V STUDY #3 DIFFERENTIAL EFFECTS OF TUTOR SKILL ON MEASURES OF STUDENT OUTCOME

DESCRIPTION

The low levels of facilitative interpersonal skills of the tutors in Study 2 rendered comparisons nonmeaningful. It was therefore decided to attempt to assess differential effects of tutor skill on student outcomes on a more skilled group of tutors. In this study, two experienced tutors who had received a different yet similar training program in communication skills and who tutored the same course were selected. Both tutors made audio tapes of telephone tutorials which were rated on Scales 1, 2, 3, and 4 (Appendix C). Student data on completions, rate of progress, and exam grades for the past year were examined.

The ratings on the audio tapes did differentiate these two tutors. The facilitative conditions for tutor 1 was FC = 2.83 and for tutor 2 FC = 2.41. This is a difference of .42 levels and is meaningful. Table 16 displays the tape analysis data.

	FC	T/S	I/D
Tutor 1	2.83	$38/_{58\%}$	$41/_{59\%}$
Tutor 2	2.41	$62/_{35\%}$	$18/_{82\%}$

TABLE 16

Both tutors are significantly higher than the average untrained tutor on the facilitative conditions. Tutor 2 is lower than the average untrained tutor on tutor/student talk ratio and about average on the indirect/direct method dimension. As can be seen, tutor 1 is superior to tutor 2 on all three indices. That is, tutor 1 is more highly skilled.

HOW DO THESE DIFFERENCES AFFECT STUDENT PROGRESS?

The measures of student successes are reported by credit. The course under study is a three-credit course with an exam for each credit plus one assignment. For each credit, the percentage of students taking the exam, the average grade and the average number of days from start date to the date the student wrote the exam are reported. The date the student wrote the exam is actually the date the mark is recorded. The overall completion rate and the number of students active or suspended are also presented.

Table 17 shows the difference in student progress for tutors 1 and 2. Tutor 1's students average 2% higher marks on all three credit exams. The mean number of days from enrolment to exam-write date is higher for tutor 1 for credit 1 (79 days versus 72 days for tutor 2) but considerably lower for credits 2 and 3 (129 days versus 173 and 154 days versus 196 respectively). The overall completion rate for tutor 1 is also higher than tutor 2 (42.5% versus 32.1%).

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	TUTOR 1	TUTOR 2
# OF STUDENTS	33	28
% taking exam 1	70%	82%
$\overline{X}$ MARK	90.4%	88%
$\overline{X}$ # days from enrolment	78.7	72
% taking exam 2	52%	53.6%
MARK	89.5%	87.8%
# days from enrolment	129	173.3
% taking exam 3	42.4%	39.3%
MARK	91.0%	88.5%
# days from enrolment	153	196
Completion rate	42.4%	32.1%
Active	3.0%	4.3%
Suspensions	6.0%	0

TABLE 17

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DISCUSSION

The differences in the student's grades, though not particularly significant, are consistently lower for tutor 2, who was lower on all three indices of effectiveness. The difference in the rate of progress through the course seems more significant. As for the completion rate, we have insufficient data on all tutors to know how significant the 10% difference between these two tutors is. The trend, however, is quite clear. *The higher functioning tutor is higher on all student outcome measures.* Thus, the results of this study lend further support for tutor skills training.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions: Initially, the goal of developing a tutor training program was to upgrade the skills of the tutors. Naturally, it was hoped that the skill improvement would produce tangible results with students. It is of greatest concern for an institution that offers open educational opportunities to adults to make good that offer by providing them the support systems necessary to make the adult learners' foray into education a success. One such support can be provided by offering the services of a skilled helper (tutor) who can guide the student into a self-directed learning style. Ultimately, then, the goal of tutor training is to disseminate successful learning skills through the tutor to the student. The Athabasca University skills training program is designed to reach the ultimate goal.

The conclusion to be drawn from the pilot project in tutor training is that it is very successful. All the research questions can be answered positively.

1. The training program can be considered desired. Almost half the tutors (43%) wanted skills training. The low actual attendance can be explained by several factors:
   1) no incentive was offered for the commitment of time and energy necessary to participate in the training workshop;
   2) a two-day workshop on Saturday and Sunday is an inconvenience to most people, particularly when they may have a full time job in addition to their tutorial duties;
   3) because the coordinators were not involved in the pilot project, no avenue for encouraging tutors to participate existed. We can hope that attending to these three reasons would tremendously improve participation.
2) The current level of functioning of a sample of A.U. tutors was determined to be below minimally facilitative levels.

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The data indicates a need for training.

3. The training is effective in changing tutor behaviour. As a result of training: a) The ratio of tutor talk to student talk decreased with students taking a more active role in the telephone conversations; b) The ratio of indirective to directive tutoring techniques increased leaving the student more opportunity for self-direction; c) The overall interpersonally facilitative conditions offered by the tutors increased with most tutors approaching the critical 3.0 threshhold.

Skill by skill, the increases were not consistent, but the trend was there. A specific weakness in the training program exists in that the tutors were not able to "put it all together" and work students through the entire problem-solving sequence fluidly.

4. Differing skill levels of tutors do have an effect on indices of student success such as completion, rate of progress, and exam grade. While startling differences were not found, none of the tutors on which data was available were at minimally facilitative levels of functioning. Nevertheless, the trend was there, the higher functioning tutors, both affectively, (Study 3) and cognitively, (Study 2), had better student completion rates. Completion rates below 50%, however, do suggest the need for further training. The best completion rate at A.U. of those tutors participating in this research program is 42.4% and belongs to the tutor functioning highest at 2.83. With 3.0 established by research as minimally effective, higher completion rates would seem obtainable with more extensive training.

At this point it is important to remember that distance education is

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an extremely complex enterprise. Such complexity suggests that the examination of factors which directly impact distance learners will require considerable attention before system-wide solutions are discovered. Moreover, it is doubtful that "blanket" solutions, capable of making dramatic changes across all courses, will be discovered. In this regard, while the strong case is being made that tutors must be skilled if they are used, the case is not being made that tutors are the only answer to student support and motivation. The differing attitudes, abilities, and general characteristics of adult part-time learners, especially in an open admissions university suggests that motivational strategies may be more effective when they are used differentially and selectively.

But tutors are used and will probably continue to be used at Athabasca University. Given these conditions, the data suggests that skills training must be offered if adequate services are to be supplied to our students.

The pilot project reported here addressed only the interpersonal dimension of the teaching-tutoring act. The whole aspect of tutoring skills per se, has not been dealt with.

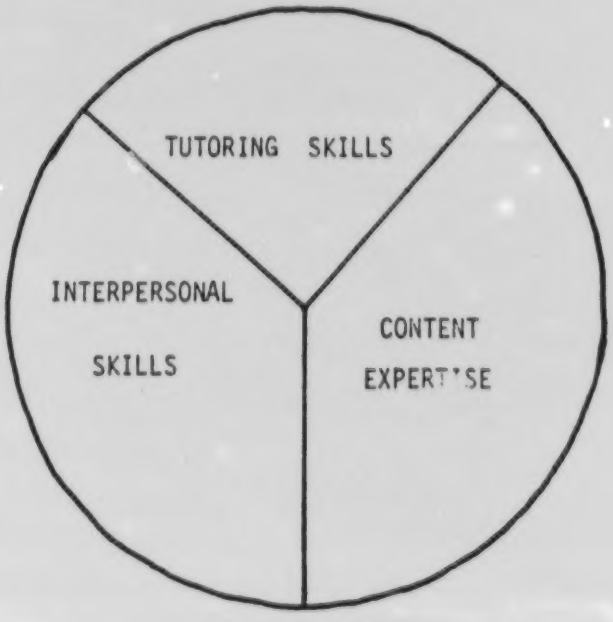

FIGURE 9

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Just as facilitative levels of interpersonal skills cannot be assumed, neither can adequate teaching skills. We at Athabasca University are assuming that the instructional package takes care of this area. The low completion rates suggest that more could be done in the area either through the instructional package or the tutor or both.

RECOMMENDATIONS

An enormous amount of information about distance education is being uncovered and brought to light through the efforts of the REDEAL projects. Some of it is very confrontive. It is at this point that we must make the effort to forge into a problem-solving activity, acknowledging our ignorances, and try to develop courses of action to rectify the situation.

The effectiveness or ineffectiveness of the tutoring operation is just such a circumstance. It is bad news. It is embarrassing. But now that we've actually taken the look and seen what the situation is, we must muster our resources and embark on the path to improvement.

The tutor skills training program we piloted was successful in making some improvements. It was not enough, however. Some specific recommendations follow which should enhance the current effectiveness considerably.

1. First and foremost it is recommended that coordinators be integrally involved in tutor training. The coordinators are the primary link between tutor and university and are the tutors' supervisors. It is they who set the tone for the tutors' attitude and behaviour toward tutoring. Consequently, it is imperative if effective tutoring is the goal that coordinators be effective supervisors. In relation to tutor training this means, at a minimum, that the coordinators be as highly skilled

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as the tutors. Becoming so most probably means receiving training. It is therefore, recommended that a parallel training program be tailored to the coordinators' supervisory/management needs. The same basic skills would be involved, but some changes in emphasis and context may be needed. In this way coordinators would be fully cognizant of the skills training the tutors are receiving and simultaneously be in a position to assist them and give them feedback.

2) As has been discussed, more time than a two-day workshop is needed to master the skills. During the pilot project, the taping-feedback procedure proved a very effective way of extending the training time without requiring much additional time of the tutor. This procedure consisted of the tutor making an audio tape recording of a tutorial session, mailing it to the project coordinator for evaluation, and receiving written and verbal feedback from same. It is highly recommended that this procedure continue and be designed to include the coordinator. Time restraints may prevent coordinators from mastering the scales and doing the ratings, but they should work in conjunction with the tutor trainer in understanding the evaluation and giving the feedback to his or her tutors. Ultimately, it is recommended that the tutors become skilled in evaluating their own tapes as an effective means of self-monitoring. Under this system, a tape could be evaluated by the coordinator on a periodic basis, say twice a year.

3) It is recommended that tutors receive some form of incentive pay for participating in training. Reimbursement serves the function of communicating that the university feels the training is valuable and that the tutor is valuable. Skills training is really professional development. Athabasca University has a generous

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professional development policy for its professional and support staff. The principle of professional development is that the university pays for the activity and gives professionals the time off thereby paying them for their time as well. Tutors could be reimbursed on the same principle by offering the training free of charge (as is already the case) and paying tutors time release by assigning "dummy" students equivalent to the time spent in training. So, for example, a two-day workshop (16 hours of tutor time) might be worth two students per month for four months.

4) It is recommended that the tutor training be revised from a two-day workshop with follow-up to a home-study package and one day workshop with follow-up. All indications from tutors were that it was very difficult and undesirable to give up a whole weekend or even two days on consecutive weekends for the training. The training was deemed very valuable and worth the effort, but it was nevertheless an inconvenience and a hardship to attend. Every tutor thought one day would be much better. It is a fact, though, that even two days was not enough time for mastery. Therefore, if the cognitive mastery could take place at the tutor's learning pace and style (at home) then the workshop time could be devoted to practicing the skills and giving and getting feedback from the trainer and the other tutor trainees.

The home study package would serve the further purpose of giving the tutors practical experience in the distance education mode of learning using the training coordinator as their tutor.

5) It is recommended that more emphasis in the training be put on the full employment of the problem-solving progression. This is the most potent coordination of the skills and was the least well

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learned. Changing to a home-study mode ought to allow the time necessary to mentally integrate the full model.

6) It is highly recommended that an ongoing and systematic data gathering procedure be set up for feedback into the system on tutor effectiveness. Tutors must know the quality of their work if they are to improve or maintain effective performance. Likewise, the university must be monitoring the differential effects of its many student support systems. Knowing that what you do has a positive or negative effect on students is an excellent incentive to keep your skills up.

7) It is recommended that a tightly controlled research study be designed to determine the optimal proportions of the effective ingredients of tutoring. We know that facilitative levels of empathy, respect and genuineness are necessary; that the proportion of tutor vs. student talk is important and may have to vary by course structure; and that indirect vs direct instructional style influences student performance. But we do not know in what way these three dimensions interact with adult learners. Recent research reported by Evertson, Anderson, Anderson and Brophy, (1980) suggests that directive vs non-directive instructional style are differentially effective depending on academic subject and whether the students are high or low on entry level skills. It is therefore recommended that a study be designed that accounts for a) facilitative levels of tutor functioning, b) student characteristics (low or high entry level skills) and c) measures of student outcome such as rate of progress, achievement and pattern of progress. By evaluating telephone calls via the taping procedure used in the preceding studies this information could be systematically analysed.

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In summary, Athabasca University is currently pioneering the area of tutor training. Many researchers and writers in distance education are urging the adult education community to implement tutor training programs (Lamacraft, 1975; Scheffknecht, 1975; Baath and Wangdahl, 1976; and Brown and Copeland, 1979). It is their assertion that the unique aspects of adult learners require more serious attention to the preparation of teachers and tutors. Athabasca University can be proud to be leading the field in the actual implementation of a research-demonstrated effective program.

VW/cf
August, 1980

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APPENDICES

APPENDIX A

INPUT QUESTIONNAIRE

1. The purpose of the project will be to develop a curriculum that will enhance tutor effectiveness. What areas should this curriculum address?

2. What are the compentencies required to perform the task? (e.g. To give oral feedback, a tutor has to be able to specifically describe the strengths and weaknesses of an assignment and give directions for improvements.)

3. What support will the tutors be given for using the skills?

4. What contraints will the tutors face?

5. What are the specific outcomes you would like to see achieved as a result of the training?

6. Describe the situations which tutors encounter with students, i.e. typical things which they discuss with students and the things that students might say in each of those areas?

7. What are things the tutor can do to verbally communicate interest/concern for the student as a person? What are the things that sometimes happen to communicate disinterest?

8. What are reasons tutors might ask students questions? (e.g. get additional information, find out thinking process, check on knowledge, re-direct student, give opportunity to talk)

9. What are some good questions coordinators feel tutors should ask?

10. What are the most common feelings students experience when carrying out their assignments?

11. What are the typical situations which tutors encounter with students? (e.g. tutor initiates a check on student work, student calls with a question about a grade)

APPENDIX B

COMMUNICATION SKILLS WORKSHOP

End-of-Workshop Participant Questionnaire

Name _____

PART I: This section of the questionnaire refers to the entire workshop.

1. Please indicate your belief about the importance of using each of the communication skills listed below with students. Use the rating scale. Circle the appropriate rating that describes your belief prior to attending this workshop and now (after attending this workshop).

RATING SCALE:

1 = Not Important
2 = Somewhat Important
3 = Important
4 = Very Important

SKILLS LIST	BEFORE WORKSHOP	AFTER WORKSHOP
The ability to communicate interest to the student.	1 2 3 4	1 2 3 4
The ability to ask facilitative questions	1 2 3 4	1 2 3 4
The ability to communicate, in one's own words, an accurate understanding of content and/or feelings expressed in the student's verbal and nonverbal message.	1 2 3 4	1 2 3 4
The ability to use description, disclosure of experience, genuineness and confrontation when sharing your perspective about a situation with a student.	1 2 3 4	1 2 3 4

Please add your own comments about the importance of using these communication skills in tutoring: _____

_____

_____

2. Rate your own skill level in each of these skills prior to attending the workshop and now (after the workshop). Use the following rating scale. Circle the appropriate rating that describes your skill level.

RATING SCALE:

1 = Poor
2 = Adequate
3 = Good
4 = Very Good
5 = Excellent

SKILLS LIST	BEFORE WORKSHOP	AFTER WORKSHOP
The ability to communicate interest to the student.	1 2 3 4 5	1 2 3 4 5
The ability to ask facilitative questions.	1 2 3 4 5	1 2 3 4 5
The ability to communicate, in one's own words, an accurate understanding of content and/or feelings expressed in the student's verbal and nonverbal message.	1 2 3 4 5	1 2 3 4 5
The ability to use description, disclosure of experience, genuineness and confrontation when sharing your perspective about a situation with a student.	1 2 3 4 5	1 2 3 4 5

Please add any comments about your communication skills level before the workshop and upon completion of this workshop: _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

3. How helpful do you feel the skills taught during the workshop will be to you in your tutoring? (Circle One)

   a. Not at all helpful

   b. A little helpful

   c. Helpful

   d. Very helpful

   Comments: _____

   _____

   _____

   _____

   _____

   _____

4. Overall, how would you rate the entire workshop experience? (Circle One)

   a. Poor

   b. Fair

   c. Good

   d. Very good

   e. Excellent

5. Please complete the following sentences as thoroughly as you can:

   a. My overall evaluation of the entire workshop is that it _____

   _____

   _____

   _____

   _____

   _____

   _____

   _____

b. I feel that the most worthwhile portion of the workshop was _____

c. I feel that the least worthwhile portion of the workshop was _____

d. Probably the best thing to do to improve the workshop would be to __

6. Listed below are severl aspects of the workshop experience. Please indicate the extent to which you were satisfield with each of the features. Use this rating scale.

RATING SCALE:

1 = Poor
2 = Fair
3 = Good
4 = Very good
5 = Excellent
N/A = Not Applicable

Circle the appropriate rating.

a.	Workshop presentations	1	2	3	4	5	N/A
b.	Workshop small group practice experiences.	1	2	3	4	5	N/A
c.	The workshop leader's presentation of curriculum.	1	2	3	4	5	N/A
d.	The workshop leaders ability to receive feedback about the usefulness and possible modificaitons of the workshop program.	1	2	3	4	5	N/A
e.	Workshop organization and planning.	1	2	3	4	5	N/A
f.	Workshop facilities.	1	2	3	4	5	N/A

Comments: _____

_____

_____

_____

_____

_____

_____

THANK YOU FOR YOUR COOPERATION

APPENDIX C

RATING SCALE ONE

	Category		Definition
			Tutor talk
CI	1	CI	Communicating interest--saying things that show you're paying attention to the student: comments on personal life, greet by name, show consideration.
CI	2	DQ	Direct question--ask for specific information: details of the situation, direct questions are frequently answered with no/yes and very brief answers.
CI	3	OQ	Open-ended question--asks for elaboration on student's perception or feelings about a situation: avoids directing the student to discuss any particular aspect.
CI	4	RF	Reflecting feelings--communicating in tutor's own words an understanding of the student expressed feelings: e.g. "You feel _____ " format.
CI	5	RC	Reflecting content--communicating in tutor's own words an understanding of the content expressed by the student. "You're saying _____" You think _____"
CP	6	G	Genuineness--praise or encouragement e.g. "Good" "I'm pleased with your work." "I think you've done well." etc.
CP	7	LQ	Leading question--question that presupposes an answer; rhetorical questions; seem to be posed to get the student to agree with you. "It's been a long time since you've studied, hasn't it?"
CP	8	E	Experience disclosure--sharing your experiences with the student; sharing experiences of other students with the student: "I think (your interpretation)." "Most students find _____".
CP	9	D	Description--explanation of content; lecture; explanation of student's situation: "It looks like you did _____" "Based on _____ you ought to _____."
CP	10	C	Confrontation--identifying discrepancies in student behaviour. "You're saying _____, but I think _____." (see Handout #12)
	0	S/C	Silence/Confusion-- silence, laughter, two talking
			Student Talk
	S		Situation--student explores a situation: content, personal, study, etc.
	C		Cause--student discusses causes of: content issues, study problems, etc.
	D		Direction--student talks of plans and alternatives.

SCALE 2

CARKHUFF SCALE: Empathic Understanding in Interpersonal Processes

Level 1

The verbal and behavioural expressions of the first person either do not *attend to or detract significantly from* the verbal and behavioural expressions of the second person(s) in that they communicate significantly less of the second person's feelings than the second person has communicated himself.

Example: The first person communicates no awareness of even the most obvious, expressed surface feelings of the second person. The first person may be bored or disinterested or simply operating from a preconceived frame of reference which totally excludes that of the other person(s).

In summary, the first person does everything but express that he is listening, understanding, or being sensitive to even the feelings of the other person in such a way as to detract significantly from the communications of the second person.

Level 2

While the first person responds to the expressed feelings of the second person(s), he does so in such a way that he *subtracts noticeable affect* from the communications of the second person.

Example: The first person may communicate some awareness of obvious surface feelings of the second person but his communications drain off a level of the affect and distort the level of meaning. The first person may communicate his own ideas of what may be going on but these are not congruent with the expressions of the second person.

In summary, the first person tends to respond to other than what the second person is experiencing and expressing.

Level 3

The expressions of the first person in response to the expressed feelings of the second person(s) are essentially interchangeable with those of the second person in that they express essentially the same affect and meaning.

Example: The first person responds with accurate understanding of the surface feelings of the second person but may not respond to or may misinterpret the deeper feelings.

In summary, the first person is responding so as to neither subtract from nor add to the expressions of the second person; but he does not respond accurately to how that person really feels beneath the surface feelings. Level 3 constitutes the minimal level of facilitative interpersonal functioning.

Level 4

The responses of the first person add noticeably to the expressions of the second person(s) in such a way as to express feelings a level deeper than the second person was able to express himself.

Example: The facilitator communicates his understanding of the expressions of the second person at a level deeper than they were expressed, and thus enables the second person to experience and/or express feelings which he was unable to express previously.

In summary, the facilitator's responses add deeper feelings and meaning to the expressions of the second person.

Level 5

The first person's responses add significantly to the feeling and meaning of the expressions of the second person(s) in such a way as to (1) accurately express feelings levels below what the person himself was able to express or (2) in the event of ongoing deep self-exploration on the second person's part, to be fully with him in his deepest moments.

Example: The facilitator responds with accuracy to all of the person's deeper as well as surface feelings. He is "together" with the second person or "tuned in" on his wave length. The facilitator and the other person might proceed together to explore previously unexplored areas of human existence.

In summary, the facilitator is responding with a full awareness of who the other person is and a comprehensive and accurate empathic understanding of his deepest feelings.

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SCALE 3

CARKHUFF SCALE: Communication of Respect in Interpersonal Processes

Level 1

The verbal and behavioural expressions of the first person communicate a clear lack of respect (or negative regard) for the second person(s).

Example: The first person communicates to the second person that the second person's feelings and experiences are not worthy of consideration or that the second person is not capable of acting constructively. The first person may become the sole focus of evaluation.

In summary, in many ways the first person communicates a total lack of respect for the feelings, experiences, and potentials of the second person.

Level 2

The first person responds to the second person in such a way as to communicate little respect for the feelings, experiences, and potentials of the second person.

Example: The first person may respond mechanically or passively or ignore many of the feelings of the second person.

In summary, in many ways the first person displays a lack of respect or concern for the second person's feelings, experiences, and potentials.

Level 3

The first person communicates a positive respect and concern for the second person's feelings, experiences, and potentials.

Example: The first person communicates respect and concern for the second person's ability to express himself and to deal constructively with his life situation.

In summary, in many ways the first person communicates that who the second person is and what he does matters to the first person. Level 3 constitutes the minimal level of facilitative interpersonal functioning.

Level 4

The facilitator clearly communicates a very deep respect and concern for the second person.

Example: The facilitator's responses enable the second person to feel free to be himself and to experience being valued as an individual.

In summary, the facilitator communicates a very deep caring for the feelings, experiences, and potentials of the second person.

Level 5

The facilitator communicates the very deepest respect for the second person's worth as a person and his potentials as a free individual.

Example: The facilitator cares very deeply for human potentials of the second person.

In summary, the facilitator is committed to the value of the other person as a human being.

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SCALE 4

CARKHUFF SCALE: *Facilitative Genuineness in Interpersonal Processes*

Level 1

The first person's verbalizations are clearly unrelated to what he is feeling at the moment, or his only genuine responses are negative in regard to the second person(s) and appear to have a totally destructive effect upon the second person.

Example: The first person may be defensive in his interaction with the second person(s) and this defensiveness may be demonstrated in the content of his words or his voice quality and where he is defensive he does not employ his reaction as a basis for potentially valuable inquiry into the relationship.

In summary, there is evidence of a considerable discrepancy between the first person's inner experiencing and his current verbalizations, or where there is no discrepancy, the first person's reactions are employed solely in a destructive fashion.

Level 2

The first person's verbalizations are slightly unrelated to what he is feeling at the moment or when his responses are genuine they are negative in regard to the second person and the first person does not appear to know how to employ his negative reactions constructively as a basis for inquiry into the relationship.

Example: The first person may respond to the second person(s) in a professional manner that has a rehearsed quality or quality concerning the way a helper "should" respond in that situation.

In summary, the first person is usually responding according to his prescribed role rather than to express what he personally feels or means and when he is genuine his responses are negative and he is unable to employ them as a basis for further inquiry.

Level 3

The first person provides no "negative" cues between what he says and what he feels, but he provides no positive cues to indicate a really genuine response to the second person(s).

Example: The first person may listen and follow the second person(s) but commits nothing more of himself.

In summary, the first person appears to make appropriate responses which do not seem insincere but which do not reflect any real involvement either. Level 3 constitutes the minimal level of facilitative interpersonal functioning.

Level 4

The facilitator presents some positive cues indicating a genuine response (whether positive or negative) in a non-destructive manner to the second person(s).

Example: The facilitator's expressions are congruent with his feelings although he may be somewhat hesitant about expressing them fully.

In summary, the facilitator responds with many of his own feelings and there is no doubt as to whether he really means what he says and he is able to employ cues for the emotional content, as a basis for further inquiry into the relationship.

Level 5

The facilitator is freely and deeply himself in a non-exploitative relationship with the second person(s).

Example: The facilitator is completely spontaneous in his interaction and open to experiences of all types, both pleasant and hurtful; and in the event of hurtful responses the facilitator's comments are employed constructively to open a further area of inquiry for both the facilitator and the second person.

In summary, the facilitator is clearly being himself and yet employing his own genuine responses constructively.

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SCALE 5

270 FLANDERS' CATEGORIES FOR INTERACTION ANALYSIS

TEACHER TALK	Indirect Influence	1. **Accepts Feelings**: Accepts and clarifies the feeling tone of the students in a non-threatening manner. Feelings may be positive or negative. Predicting or recalling feelings are included. 2. **Praises or Encourages**: Praises or encourages student action or behavior. Jokes that release tension, not at the expense of another individual, nodding head or saying, "um hm?" or "go on" are included. 3. **Accepts or Uses Ideas of Student**: Clarifying, building, or developing ideas suggested by a student. As teacher brings more of his own ideas into play, shift to Category 5. 4. **Asks Questions**: Asking a question about content or procedure with the intent that a student answer.
	Direct Influence	5. **Lecturing**: Giving facts or opinions about content or procedure; expressing his own ideas; asking rhetorical questions. 6. **Giving Directions**: Directions, commands, or orders to which a student is expected to comply. 7. **Criticizing or Justifying Authority**: Statements intended to change student behavior from non-acceptable to acceptable pattern; bawling someone out; stating why the teacher is doing what he is doing; extreme self-reference.
STUDENT TALK		8. **Student Talk**: Response: talk by students in response to teacher. Teacher initiates the contact or solicits student statement. 9. **Student Talk**: Initiation: talk by students which they initiate. If "calling on" student is only to indicate who may talk next, observer must decide whether student wanted to talk. If he did, use this category.
		10. **Silence or Confusion**: Pauses, short periods of silence and periods of confusion in which communication cannot be understood by the observer.

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SCALE 6

COGNITIVE FUNCTIONING CATEGORIES

PERSON		CATEGORY OF BEHAVIOR
TEACHER	Memory	1. Demonstrates knowledge of a fact (Memory or recall and recognition). 2. Solicits student to demonstrate knowledge of a fact.
	Thinking	3. Uses a fact (thinking) Examples (a) to solve a problem or propose an attack on problem (b) to analyze a situation 4. Solicits student to use a fact (thinking) Examples (a) to solve a problem (b) to analyze a situation
STUDENT	Memory	5. Demonstrates knowledge of a fact (memory or recall). 6. Solicits someone else to demonstrate knowledge of a fact.
	Thinking	7. Uses a fact (thinking) Examples (a) to solve a problem (b) to analyze a situation 8. Solicits someone else to use a fact Examples (a) to solve a problem (b) to analyze a situation
		9. Affective behavior 10. Silence or confusion

APPENDIX D

COMMUNICATION SKILLS WORKSHOP

Post-Workshop Questionnaire

Name _____ Date _____

1. List and describe what you would do to communicate to a student about her performance in a course.

2. Imagine you have called a student who has been in the course about 6 weeks. The student wrote the first assignment early but hasn't sent in any assignments for a month.

   A. Please write down, word-for-word, a question you might ask to get the student's perspective concerning her pacing.

2B. The student then says to you: "I've just been so busy. There always seems to be something coming along and interfering with my working on the course".

Please write down exactly what you would say to show you understand the student's perspective concerning her pacing.

2C. The student has described her reason (i.e., things just coming up that interfere). You feel that the student must develop a regular work routine if she is to complete the course. Thus, your perspective differs from the student's perspective.

Please write down, word-for-word, what you would say to the student when sharing your perspective concerning her approach to scheduling. USE AS MANY DIFFERENT WAYS AS YOU CAN TO CONSTRUCTIVELY SHARE YOUR PERSPECTIVE.